

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (Canceled)

Claim 2. (Canceled)

Claim 3. (Canceled)

Claim 4. (Canceled)

Claim 5. (Previously Presented) The method of Claim 10 wherein said native tissue to be treated is soft tissue including vascular vessel, heart valve, heart sac, cornea, amnion and dura.

Claim 6. (Canceled)

Claim 7. (Previously Presented) The method of Claim 10 wherein said native tissue to be treated is an organ or part thereof including heart, kidney, liver, pancreas, brain and part thereof.

Claim 8. (Previously Presented) The method of Claim 10 further comprising the step of washing said tissue with a fresh washing liquid following said irradiation step to remove destructed donor cells.

Claim 9. (Previously Presented) The method of Claim 10 wherein said native tissue to be treated has been pre-treated to facilitate the removal of donor cells.

Claim 10. (Currently Amended) A method of decellularizing native tissue of mammalian origin comprising irradiating with microwaves at a frequency of 2450 MHz for a net

period of time of at least 1 hour, tissue immersed in a treating solution containing a detergent, in the absence of a fixation chemical, while maintaining the temperature of the tissue in the range between 0°C and 40°C, whereby the tissue is decellularized even in deep interior portions as determined to be free from any residual cellular nuclei in histological examination of hematoxylin-eosin stained tissue.

Claim 11. (Previously Presented) The method of Claim 10 wherein said tissue is immersed in said treating solution received in a microwave-transmitting container which, is, in turn, in heat-exchange contact with a coolant liquid received in a microwave-transmitting vessel, and wherein said tissue is irradiated with microwaves in a microwave oven while circulating said coolant liquid through a cooling apparatus provided externally of the microwave oven.

Claim 12. (Canceled).